

Work Order ID 72785

Page 1

Friday, August 12, 2011 2:38:48 PM

Item ID: D206-642-241

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 8/12/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 8/19/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date: 8-12-12 Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2650

Rev F

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D206-642-241

CHG005

N/A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

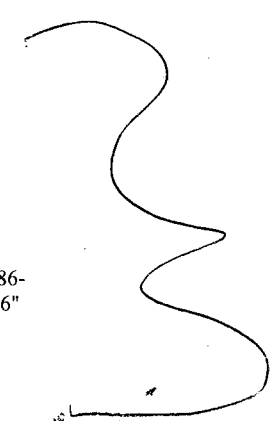
SPC (Y/N):

Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110 	Skidtubes	0.00							
Skidtubes	Memo 1- Deburr Fwd edge of tube	0.00							
Skidtubes	2- Remove ridge on inside of Fwd edge of tube as per Dwg D2650								
	3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required. Pick: Qty <input type="checkbox"/> Part Number <input type="checkbox"/> Description <input type="checkbox"/> Batch A/R <input type="checkbox"/> Aluminum Rod <input type="checkbox"/> <u>M112B60</u> <i>BE 11/09/15</i>								
	4-Grind weld flush to cap on top surface only. <i>BE 11/09/15</i>								
	5-Cut Aft end as per dwg 2650 from front of tube and Deburr								
	6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D2650								
	7-Open holes for Aft end cap as per Dwg D2650 with #30 Drill Bit using DT8025.								
	8-Drill pilot holes using Dt 8167.								
	9-Locate DT8732 from inner Aft saddle hole & 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 & D206-642-241-T1, then locating doubler off of 3/16" holes, cleco DT8732 & doubler leaving DT8732 for added support.								
	10- Drill D3286-1 doubler rivet holes in tube using # 30 drill, spot drilling doubler at the same time.								

> 04/15P 11/09/15

BE 11/09/15



BE 11/11/07

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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11-Working from the center out, drill # 30 holes into D3286-I doubler. Cleco each hole as it is being drilled. Verify angle of holes to accommodate rivet heads.

12-Remove 3/16" cleco's only and open GHW holes to Ø0.500" as per Dwg D2650

13-Remove D3286-I doublers, identify orientation, deburr, then attach them to the workorder

14-Remove indexing edge using DT8741 as per Dwg D2650

15-C'sink GHW rivet holes as per Dwg D2650

BE11/11/07

120



QC

Quality Control

QC6- Inspect dimensions to drawing

0.00

Memo

0.00

5.11/11/08

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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[illegible]

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Accept

Setup Start

Stop

Cust Item ID:

Customer:

Reference:

Run Start

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

130

Skidtubes

Skidtubes:

Skidtubes

Memo

1-Open crossbolt holes to Ø0.3125"

2-Drill pilot holes using DT8028-3, then open to Ø0.297" as per Dwg D2650.
Open Aft cap hole #6.

3-Deburr tube and blow out chips from inside the tube

0.00

0.00

140

[illegible]

HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

Memo

0.00

0.00

150

[illegible]

QC

Quality Control

QC3- Inspect Part Finish

Memo

0.00

0.00

Dart Aerospace Ltd

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Open holes to finished size as per Dwg D2650, D2650-3 Drilling Detail
(without cutting fluid)

2-C'sink crossbolt spacer holes as per Dwg D2650(without cutting fluid)

3-Deburr and blow out all chips from inside the tube

1 0 BE11/1/08

170

0.00



QC6- Inspect dimensions to drawing

QC

Memo

0.00

Quality Control

DP 11-11-9

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

180

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Locate, install and rivet doublers as per Dwg D2650. Micro-shave rivets as required

OK 11/11/09

2-Bond D2654-3 web in place as per QSI 015. Ensure holes line up. Allow 12 Hrs. cure time before cutting

Start Date: 11/11/09 Time: 3:00Finish Date: 11/11/09 Time: 5:00

OK 11/11/09

Pick:

Qty ☐ Part Number ☐ Description ☐ BatchA/R ☐ Sikaflex-291 ☐ 119399 ☐Sikaflex expire date: 12/08/13

190

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

1 - OK BE 11/11/10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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200

0.00



Skidtubes

Skidtubes

Memo

0.00

1-remove alodine from around hole and prepare for welding

2-Prep per QSI 005 and Insert D2649 crossbolt spacers. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

Pick:

Qty ☐ Part Number ☐ Description ☐ BatchA/R ☐ Aluminum Rod ☐

M117884

3-Grind welds flush as per Dwg D2650.

4-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D2650. Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required.

A/R ☐ SS Rod ☐

NONE

5-Counterbore 5/16" x 0.750" deep except 7th hole from Aft end as per Dwg D2650. Deburr

BE 11/11/10

BE 11/11/10

BE 11/11/10

DP

11-11-11

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Customer:

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	HandFinishing	0.00							
	HandFinish	0.00							
Hand Finishing	Memo								
	Install D2680-041 Nut Plate as per Dwg D2650								
215	QC9								
220	QC10- Inspect visual per QSI004- ground welds	0.00							
	QC	0.00							
Quality Control	Memo								
230	QC5- Inspect part completeness to step on W/O	0.00							
	QC	0.00							
Quality Control	Memo								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

240

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in tank.

IX Ø M- 4/11/14

250

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

9:30
320 OF
10:00

IX Ø M- 4/11/15

260

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 BR 11-11-16

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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Customer:

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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270

0.00



HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1- Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R ☐ ☐ Sikaflex-291 ☐ ☐ 119443 ☐ ☐Sikaflex expire date: 12-1

2-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install plugs as per Dwg D2650 (D2650-3 detail). Clean excess adhesive.

3-Install MS27039-4-06 Screw as per DEO 9153.

4 -Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive

A/R ☐ ☐ Sikaflex-291 ☐ ☐ 119443 ☐ ☐Sikaflex expire date: 12-1

5 -Wing Walk as per Dwg D2650-3 and QSI 005 4.4

A/R Batch: 118988 ☐

Batch: _____

1 BR 11-11-16.

300

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

Sulu

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
310		0.00							
	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D206-664-241								
	Location: _____								
	PPP Rev: <u>PPP 72780</u>								
320		0.00							
	QC21- Final Inspection - Work Order Release								
QC	Memo	0.00							
Quality Control									

*8/14/2011**11/11/28**MF 11-11-25*

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

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Parent Item: D206-642-241

Parent Item Name: Replacement Skidtube



Start Date: 8/12/2011

Required Date: 8/19/2011

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev: 04.12.02 Revised procedural steps KJ/JLM IPP RevP: revise and update route/bom DD 10.01.06 verified by:EC IPP rev Q 10.02.19 per PAR 09-043 EC verified by: DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D2620

Manufactured

No

110

Each

18.0000

1

1



Skidtube, 206 Skidtube

Location

Loc Qty

Loc Code

LG

18

68136

1

71616

5

71617

12

D3286-1

Manufactured

No

110

Each

32.0000

2

2



Doubler

Location

Loc Qty

Loc Code

LG002

32

52844

11

64563

21

D2647

Manufactured

No

110

Each

44.0000

1

1



Cap

Location

Loc Qty

Loc Code

LG002

44

55352

14

71171

30

① DP 11-9-15

BE 11/11/07
B 74441 "2

BE 11/09/15

Dart Aerospace Ltd

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Parent Item: D206-642-241



Parent Item Name: Replacement Skidtube

Start Date: 8/12/2011

Required Date: 8/19/2011

Start Qty: 1.00

Required Qty: 1.00

D2654-3 Manufactured No

180 Each

4.0000

1

1



Web



DC 11/11/09

Location

Loc Qty

Loc Code

LG

4

1

64876

4

CR3212-4-04

Purchased No

180

Each

555.0000

52

52



Cherry Rivet

Location 119017

Loc Qty

Loc Code

ST311

555

55

116471

78

117816

477

D2649

Manufactured No

200

Each

130.0000

18

18



Cross Bolt Spacer

Location

Loc Qty

Loc Code

LG

118

68224

2

71355

2

72704

114

LG001

12

65317

1

68507

11

D3286-3

Manufactured No

200

Each

27.0000

2

2



Spacer

Location

Loc Qty

Loc Code

LG002

27

64564

27

B 74439 3241/11 x 2

Dart Aerospace Ltd

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Parent Item: D206-642-241



Parent Item Name: Replacement Skidtube

Start Date: 8/12/2011

Required Date: 8/19/2011

Start Qty: 1.00

Required Qty: 1.00

D2680-041 Manufactured No

210 Each

19.0000 1 1



Nut Plate

DP 11-11-11

Location

Loc Qty

Loc Code

ST020 73854 19
55366 17
70088 2

①

CR3212-4-03 Purchased No

210 Each

1,174.000 2 2



Cherry Rivet

DP 11-11-11

Location

Loc Qty

Loc Code

FP-B 2
110139 2
ST311 1172
114859 1172

②

CCR264SS3-3 Purchased No

210 Each

471.0000 2 2



Cherry Rivet

DP 11-11-11

Location

Loc Qty

Loc Code

FP-B 2
113973 2
ST311 469
117086 43
117849 426

②

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 12, 2011 2:38:55 PM

Work Order ID: 72785

Parent Item: D206-642-241

Parent Item Name: Replacement Skidtube

Start Date: 8/12/2011

Required Date: 8/19/2011

Start Qty: 1.00

Required Qty: 1.00

D2646 Manufactured No

270

Each

101.0000

1

1



Aft Cap



BR 11-11-16.

Location

Loc Qty

Loc Code

FP004

73294.

54

68280

54

FP006

5

62678

5

FP-4

38

70945

1

71070

37

fp5

4

71038

4

D2651-1 Manufactured No

270

Each

289.0000

18

18



Plug



BR 11-11-16.

Location

Loc Qty

Loc Code

fpa

73807.

109

69018

109

FP-A

180

57869

1

66445

10

67760

36

70691

100

70839

2

71037

31

AN960JD416 ☒ NAS1149D0463J Purchased No

270

Each

0.0000

1

1



Washer



118384.

BR 11-11-16.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 5

Friday, August 12, 2011 2:38:55 PM

Work Order ID: 72785

Parent Item: D206-642-241

Parent Item Name: Replacement Skidtube

Start Date: 8/12/2011

Required Date: 8/19/2011

Start Qty: 1.00

Required Qty: 1.00

D2651-3 Manufactured No

270

Each

294.0000

18

18



O-Ring

Location

Loc Qty

Loc Code

FP-A

73489.

294

61962

12

66956

282

18.

BL 11-11-16.

MS27039-1-08 Purchased No

270

Each

902.0000

46

46



Screw

Location

Loc Qty

Loc Code

ST291

902

115108

202

117423

300

118378

400

NG.

BL 11-11-16.

ALS4-1032-130 Purchased No

270

Each

2,276.000

44

44



Insert

Location

Loc Qty

Loc Code

ST281

378

117331

8

118386

370

ST282

1898

117717

54

118237

1388

118312

256

* ALS7-1032-130.

119530.

44. BL 11-11-16.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 12, 2011 2:38:55 PM

Work Order ID: 72785

Parent Item: D206-642-241

Parent Item Name: Replacement Skidtube

Start Date: 8/12/2011

Required Date: 8/19/2011

Start Qty: 1.00

Required Qty: 1.00

MS27039-4-06

Purchased

No

270

Each

37.0000

1

1



Screw

Location

Loc Qty

Loc Code

FP-A

119075
115460

8

8

ST292

115460

29

29

AN960JD10L

✱ NAS1149D03321 ✓

Purchased

No

270

Each

0.0000

46

46



Washer

D3537-1

Manufactured

No

270

Each

27.0000

4

4



Wearpad

Location

Loc Qty

Loc Code

FP

74436.
71574

20

20

FP017

69817
70686

7

5

2

D3537-3

Manufactured

No

270

Each

23.0000

1

1



Wearpad

Location

Loc Qty

Loc Code

FP

72144
70481

17

17

FP017

35697
72686

6

1

5

BR 11-11-16.

BR 11-11-16.

BR 11-11-16.

BR 11-11-16.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 12, 2011 2:38:55 PM

Page 7

Work Order ID: 72785

Parent Item: D206-642-241

Parent Item Name: Replacement Skidtube

Start Date: 8/12/2011

Required Date: 8/19/2011

Start Qty: 1.00

Required Qty: 1.00

D3535-13

Manufactured No

270

Each

1.0000

1

1



Wearshoe

Location

Loc Qty

Loc Code

FP018

72786
65930

1

1

D3536-13

Manufactured No

270

Each

9.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP011

70463

9

9

D3535-21

Manufactured No

270

Each

15.0000

1

1



Wearshoe

Location

Loc Qty

Loc Code

FP018

65788
70380
70461

15

1

8

6

D3536-21

Manufactured No

270

Each

14.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP011

61684
70464

14

2

12

BR 11-11-16.

BR 11-11-16.

BR 11-11-16.

BR 11-11-16.

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 12, 2011 2:38:55 PM

Page 8

Work Order ID: 72785



Parent Item: D206-642-241



Parent Item Name: Replacement Skidtube

Start Date: 8/12/2011

Required Date: 8/19/2011

Start Qty: 1.00

Required Qty: 1.00

D3535-33

Manufactured No

270

Each

18.0000

1

1



Wearshoe



BR 11-11-16.

Location

Loc Qty

Loc Code

FP019

18

70383 ✓

8

70462

10

1

D3536-33

Manufactured No

270

Each

26.0000

1

1



Gasket



BR 11-11-16.

Location

Loc Qty

Loc Code

FP012

26

70382 ✓

10

70465

16

1

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 72285

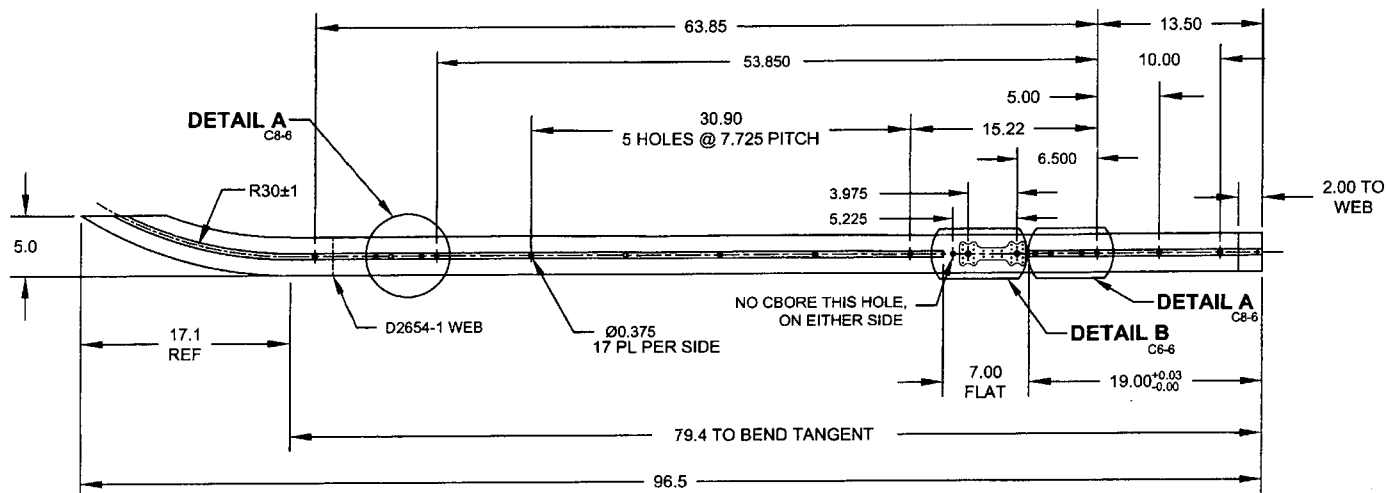
11-08-12

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08-07-23

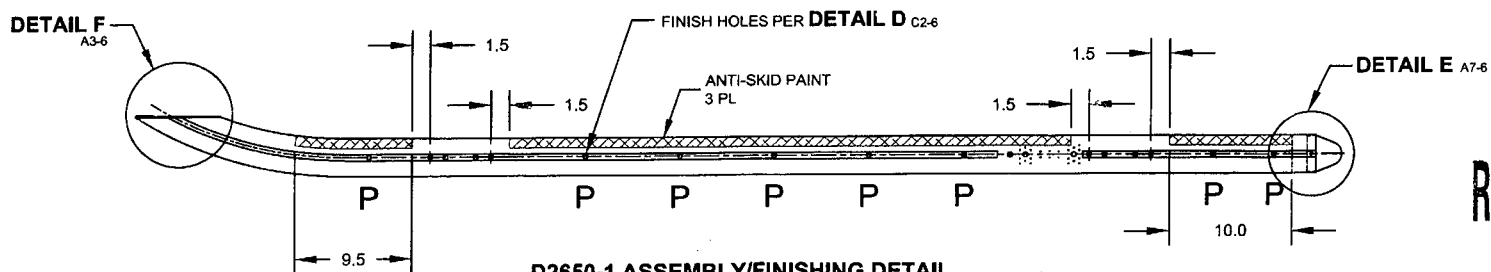
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-2417-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

F	DRAWING UPDATED TO CURRENT STANDARDS. SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	REMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW; INCCORP. DE09136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



D2650-1 BENDING/DRILLING DETAIL



D2650-1 ASSEMBLY/FINISHING DETAIL

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 2 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
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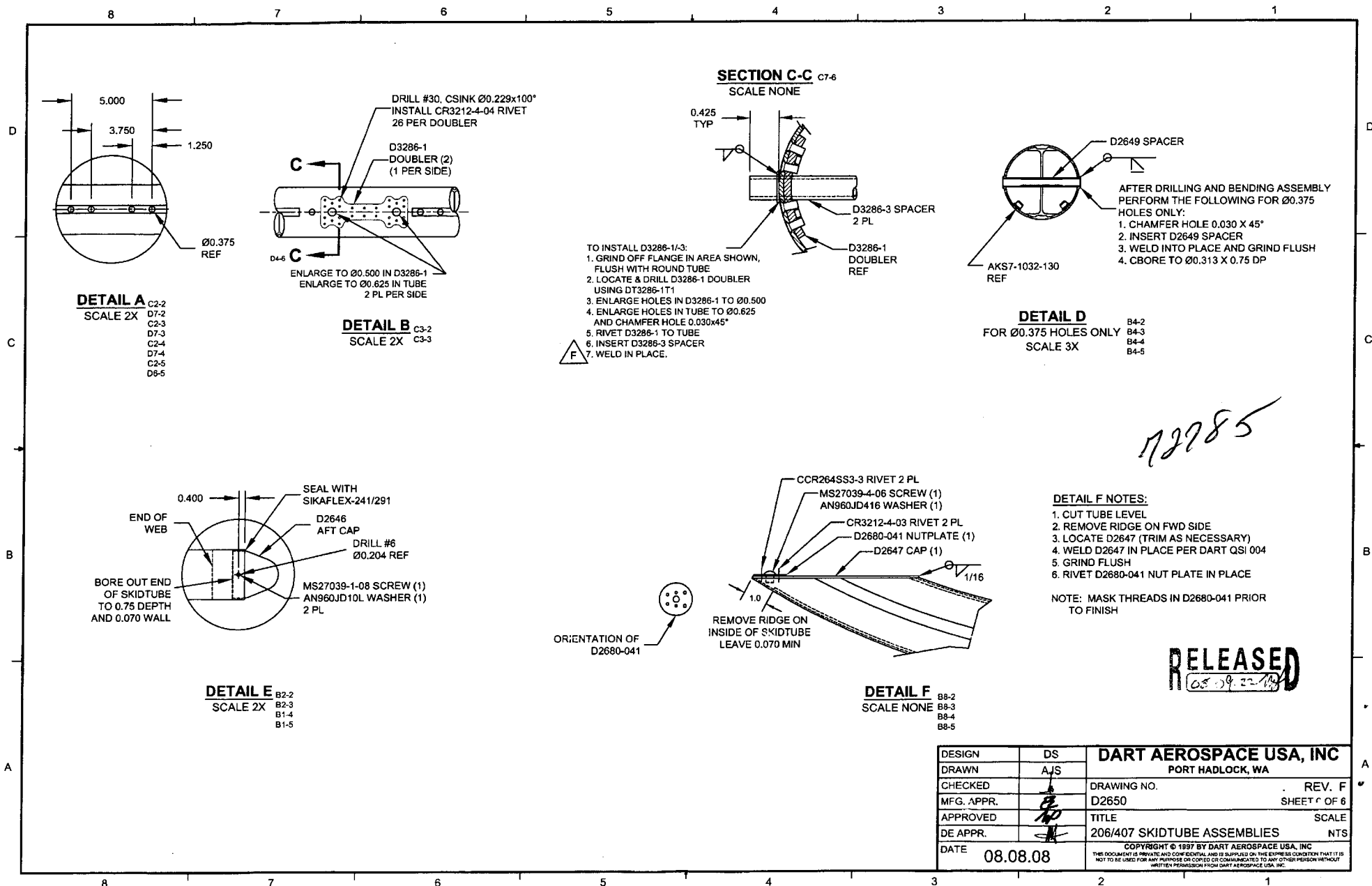
RELEASED
2009-22-1118

172785



RELEASE
08 07 22 1111

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	<i>[Signature]</i>	D2650	SHEET 3 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	206/407 SKIDTUBE ASSEMBLIES	NTS
DATE 08.08.08		COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS COMPREHENSION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT	



NO. 273

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 74236
Part number: D206 642 151
Description: 206 skid tube
Welding Process: Tig ☒ Mig ☐
Base material: Aluminum
Current: AC ☒ DC ☐

TEST REQUIREMENTS AND RESULTS

Visual: pass ☒ fail ☐
Penetration: pass ☒ fail ☐

UNACCEPTABLE

Cracks: pass ☒ fail ☐
Undercut: pass ☒ fail ☐
Pin holes: pass ☒ fail ☐
Overlap (cold lap): pass ☒ fail ☐
Porosity (surface): pass ☒ fail ☐
Coloration: pass ☒ fail ☐

Qualifier Sal Luns Date of Test Coupon 11-10-25

Welder Barclay Elliott Date of Test Coupon 11-10-25

The above named individual is qualified in accordance with AWS D17.1.2001 to weld